AMENDMENTS TO THE CLAIMS

Please cancel claims 2-10, 17, and 18, amend claims 1, 11-16, and 19-28, and insert new claims 29-46, as follows. A complete listing of pending claims is provided below.

1. (Currently Amended) A system for delivering power to a therapeutic device, comprising:

a generator including a power regulation circuit for producing an output power at a generator output;

a patient cable having a proximal end configured for coupling to the generator output, and a distal end configured for coupling to ~~the~~ a therapeutic device; and

a feedback apparatus coupled to ~~one or both of~~ the distal end of the patient cable ~~and the therapeutic device~~, the feedback apparatus ~~configured to sense at least one variable that depends on a delivered power and~~ comprising a current sensor, and configured to generate a feedback signal ~~depending on the delivered power~~ based on a current sensed by the current sensor;

wherein the power regulation circuit is configured to compensate for a power change along the patient cable by controlling the output power based at least in part on the feedback signal.

2-10. (Canceled)

11. (Currently Amended) The system ~~for delivering power in~~ of claim 1, further comprising a feedback path coupled to the feedback apparatus for transmitting the feedback signal to the generator.

12. (Currently Amended) The system ~~for delivering power in~~ of claim 11, wherein the feedback path comprises ~~of~~ at least one wire connected to the power generator.

13. (Currently Amended) The system ~~for delivering power in~~ of claim ~~12~~ 11, wherein the feedback path comprises ~~of~~ a wireless transmitter.

14. (Currently Amended) The system ~~for delivering power in~~ of claim 1, wherein the feedback signal is analog.

15. (Currently Amended) The system ~~for delivering power in~~ of claim 1, wherein the feedback signal is digital.

16. (Currently Amended) A method for delivering power to a therapeutic device, comprising:

generating an output power;

delivering the output power over a patient cable to ~~the~~ a therapeutic device;

sensing ~~at least one variable that depends on the delivered power~~ a current at a distal end of the patient cable or at the therapeutic device;

generating a feedback signal ~~that depends on the sensed variable~~ based on the sensed current; and

modifying the generated output power based at least in part on the feedback signal such that a power change along the patient cable is compensated.

17-18. (Canceled)

19. (Currently Amended) The method ~~for delivering power in~~ of claim 16, wherein the sensing step comprises sensing ~~a current and a voltage near~~ a current at the distal end of the patient cable.

20. (Currently Amended) The method ~~for delivering power in~~ of claim 16, wherein the sensing step comprises sensing ~~the delivered power near the distal end of the patient cable~~ a current at the therapeutic device.

21. (Currently Amended) The method ~~for delivering power in~~ of claim 16, wherein the therapeutic device delivers radio frequency (RF) energy.

22. (Currently Amended) The method ~~for delivering power in~~ of claim 16, wherein the therapeutic device delivers microwave energy.

23. (Currently Amended) The method ~~for delivering power in~~ of claim 16, wherein the therapeutic device delivers ultrasound energy.

24. (Currently Amended) The method ~~for delivering power in~~ of claim 16, ~~the method~~ further comprising ~~step of~~ transmitting the feedback signal to a power generator that generates the output power.

25. (Currently Amended) The method ~~for delivering power in~~ of claim 24, wherein the transmitting step ~~uses~~ comprises using at least one wire to transmit the feedback signal.

26. (Currently Amended) The method ~~for delivering power in~~ of claim 24, wherein the transmitting step ~~uses~~ comprises using a wireless transmitter to transmit the feedback signal.

27. (Currently Amended) The method ~~for delivering power in~~ of claim 16, wherein the feedback signal is analog.

28. (Currently Amended) The method ~~for delivering power in~~ of claim 16, wherein the feedback signal is digital.

29. (New) The method of claim 16, further comprising sensing a voltage at a distal end of the patient cable or at the therapeutic device.

30. (New) The method of claim 29, wherein the feedback signal is generated based on the sensed current and the sensed voltage.

31. (New) The system of claim 1, wherein the feedback apparatus further comprises a voltage sensor.

32. (New) The system of claim 31, wherein the feedback apparatus is configured to generate a feedback signal based on a current sensed by the current sensor and a voltage sensed by the voltage sensor.

33. (New) The system of claim 1, wherein the patient cable comprises an extension cord.

34. (New) The system of claim 1, wherein the patient cable comprises a plurality of extension cords.

35. (New) A system for delivering power to a therapeutic device, comprising:

a generator including a power regulation circuit for producing an output power at a generator output;

a patient cable having a proximal end configured for coupling to the generator output, and a distal end configured for coupling to a therapeutic device; and

a feedback apparatus coupled to the distal end of the patient cable, the feedback apparatus comprising a voltage sensor, and configured to generate a feedback signal based on a voltage sensed by the voltage sensor;

wherein the power regulation circuit is configured to compensate for a power change along the patient cable by controlling the output power based at least in part on the feedback signal.

36. (New) A method for delivering power to a therapeutic device, comprising:

generating an output power;

delivering the output power over a patient cable to a therapeutic device;

sensing a voltage at a distal end of the patient cable or at the therapeutic device;

generating a feedback signal based on the sensed voltage; and

modifying the generated output power based at least in part on the feedback signal such that a power change along the patient cable is compensated.

37. (New) The method of claim 36, wherein the sensing step comprises sensing a voltage at the distal end of the patient cable.

38. (New) The method of claim 36, wherein the sensing step comprises sensing a voltage at the therapeutic device.

39. (New) A therapeutic system, comprising:

a therapeutic device;

a generator including a power regulation circuit for producing an output power at a generator output;

a patient cable having a proximal end coupled to the generator output, and a distal end coupled to the therapeutic device; and

a feedback apparatus coupled to the therapeutic device, the feedback apparatus comprising a current sensor, and is configured to generate a feedback signal based on a current sensed by the current sensor;

wherein the power regulation circuit is configured to compensate for a power change along the patient cable by controlling the output power based at least in part on the feedback signal.

40. (New) The system of claim 39, wherein the therapeutic device delivers radio frequency (RF) energy.

41. (New) The system of claim 39, wherein the therapeutic device delivers microwave energy.

42. (New) The system of claim 39, wherein the therapeutic device delivers ultrasound energy.

43. (New) A therapeutic system, comprising:

a therapeutic device;

a generator including a power regulation circuit for producing an output power at a generator output;

a patient cable having a proximal end coupled to the generator output, and a distal end coupled to the therapeutic device; and

a feedback apparatus coupled to the therapeutic device, the feedback apparatus comprising a voltage sensor, and is configured to generate a feedback signal based on a voltage sensed by the voltage sensor;

wherein the power regulation circuit is configured to compensate for a power change along the patient cable by controlling the output power based at least in part on the feedback signal.

44. (New) The system of claim 43, wherein the therapeutic device delivers radio frequency (RF) energy.

45. (New) The system of claim 43, wherein the therapeutic device delivers microwave energy.

46. (New) The system of claim 43, wherein the therapeutic device delivers ultrasound energy.